

Amendments to the Claims:

Please amend claims 1-17, add new claims 18-21, all as shown below. All pending claims are reproduced below.

1. (Currently amended) A tool for cleaning the surface of a workpiece, comprising:

a ~~flame~~ torch operable to produce a flame via combustion;

a staging component operable to position the workpiece;

an injecting component operable to inject a reactive precursor into the ~~flame~~ torch;

a translating component operable to translate at least one of the workpiece and the ~~flame~~ torch; and

said ~~flame~~ torch operable to combine ~~the~~ a reactive species produced from the reactive precursor chemically with a contaminant on the surface of the workpiece to clean the surface of the workpiece.

2. (Currently amended) A tool for cleaning the surface of a workpiece, comprising:

~~a flame torch~~ means for producing a flame via combustion;

means for positioning the workpiece;

means for injecting a reactive precursor into the ~~flame~~ torch;

means for translating at least one of the workpiece and the ~~flame~~ torch; and

means for combining ~~the~~ a reactive species produced from the reactive precursor chemically with a contaminant on the surface of the workpiece to clean the surface of the workpiece.

3. (Currently amended) A tool for cleaning the surface of a workpiece, comprising:

a ~~flame~~ torch operable to produce a flame via combustion; and
a translator that can translate at least one of a workpiece and said torch;
wherein said torch is configured to receive a reactive precursor and generate a reactive species capable of chemically combining with a contaminant on the surface of the workpiece to produce a gas and leave the surface.

4. (Currently amended) A tool according to claim 3, further comprising:

a controlling component operable to generate a hydrogen-oxygen flame via the ~~flame~~ torch.

5. (Currently amended) A tool according to claim 3, further comprising:

a controlling component operable to produce a stream of atomic radicals that can be used to modify a surface via the ~~flame~~ torch.

6. (Currently amended) A tool according to claim 3~~5~~, further comprising:

a controlling component operable to produce a stream that can modify a surface by a process selected from the group consisting of cleaning, passivating, and activating via the ~~flame~~ torch.

7. (Currently amended) A tool according to claim 3, further comprising:

a controlling component operable to produce a stream of atomic radicals that can modify a surface by a process selected from the group consisting of shaping, polishing, etching, planarizing, and redepositing via the ~~flame~~ torch.

8. (Currently amended) A tool according to claim 3, further comprising:

a flame suppressor in said ~~flame~~ torch.

9. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch includes at least one tube to receive process gas, which can be a fuel or an oxidizer.

10. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch includes at least one tube to receive process gas selected from the group consisting of oxygen and hydrogen.

11. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch has a central tube for receiving a reactive precursor.

12. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch has a central tube for receiving a reactive precursor selected from the group consisting of CF₄, O₂, Cl and NH₃.

13. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch has a chemically inert metal tip.

14. (Currently amended) A tool according to claim 3, wherein:

said translator is a rotational stage for supporting the workpiece and rotating the workpiece with respect to the ~~flame~~ torch.

15. (Currently amended) A tool according to claim 3, wherein:

said ~~flame~~ torch includes a multi-nozzle burner.

16. (Currently amended) A tool for cleaning the surface of a workpiece, comprising:

a ~~flame~~ torch operable to receive a reactive precursor and produce a flame via combustion;
wherein said ~~flame~~ torch further comprises an internal zone where the reactive precursor is fragmented into a stream of atomic radicals that can be used to clean a surface.

17. (Currently amended) A tool for modifying the surface of a workpiece, comprising:

a ~~flame~~ torch operable to receive a reactive precursor and produce a flame via combustion;
wherein said ~~flame~~ torch further comprises an internal zone where the reactive precursor is fragmented into a stream of atomic radicals that can be used to modify a surface.

18. (New) A tool for cleaning the surface of a workpiece, comprising:

a torch operable to produce a flame via combustion;
wherein said torch is configured to receive a reactive precursor and generate a reactive species capable of chemically combining with a contaminant on the surface of the workpiece to produce a gas that leaves and/or modifies the surface.

19. (New) A tool for cleaning the surface of a workpiece, comprising:

a self-sustaining torch;

wherein said torch is configured to receive a reactive precursor and generate a reactive species capable of chemically combining with a contaminant on the surface of the workpiece to produce a gas that leaves and/or modifies the surface.

20. (New) A tool according to claim 19, wherein:

the torch is operable to produce a flame via combustion.

21. (New) A tool that can modify the surface of a workpiece, comprising:

a torch operable to produce a flame via combustion; and

wherein said torch is configured to receive a reactive precursor and generate a reactive species capable of chemically combining with a contaminant on the surface of the workpiece to modify the surface.